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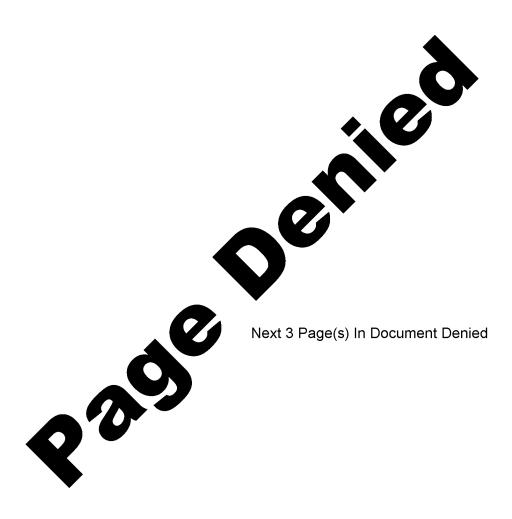
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	VEV HIDOMENTO COVIET OFNEDAL DI	UDDOOF DIGITAL GOLDSUTED	
5	KEY JUDGMENTS: SOVIET GENERAL-PUTECHNOLOGY	IRPOSE DIGITAL COMPUTER	•
	The USSR lags the United States in all s		
	areas of general-purpose digital comput examined: micro-processors, internal m	nemories,	
	minicomputers, mainframes, large scient software, and peripheral equipment. The	e US lead is expected	
	to continue to increase at least through barring unexpected Soviet technological	breakthroughs,	
	probably through the remainder of the 1	98US	
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KEY JUI	OGMENTS: SOVIET GENERA	AL-PURPOSE DIG	ITAL COMPUTER TECHNOLOGY	2
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The	United States leads the U	JSSR in all fields	of general-purpose digital	
COI	nputer technology. This le	ead ranges from	at least three years for	
			rs in high-performance magnetic he remainder of the 1980s	
wil	be for the US lead to inc	rease, although,	for some high-priority	
	dications, the Soviets may ticular technology gap.	be able to reduc	e or design around a	2
μai	licular technology gap.			۷.
			outer technology and in computer s has been overwhelmed by the	
	id advances made in the V		3 Has been overwhelined by the	2
The	re are many reasons why	the Soviets trail	the United States in computer	
tec	hnology:		·	
	·	•	does not permit adequate	
	flexibility to respond to	-		
		-	eduction; this situation has components—especially for	
	new products.	3	, , , , ,	
	The extraordinary comp	partmentalization	of information in the USSR	
	especially on technolog			
			the flow of information, work because of a lack of	
	knowledge about other		work because of a fack of	
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 The Soviet preoccupation with meeting production quotas, frequently at the expense of component and system quality control. 	
 The lack of adequate incentives for Soviet managers to take the risks associated with innovations or new technology. 	
 Poor coordination between separate design institutes and production facilities, sometimes resulting in products that have to be redesigned to fit a factory's production capabilities. 	
The Soviets' lag in computer-aided design and computer-aided manufacturing techniques caused by a belated development start and also, ironically, by the Soviets' lag in computer technology.	
Concerns by Soviet officials that a computer is a powerful tool that could be used for antirevolutionary activity; these concerns tend to restrict access to and first-hand knowledge about computers as well as their applications.	
 Provincial disputes within and between ministerial and institutional organizations. 	
 Very poor customer support—including inadequate user feedback, poor installation support, and delayed maintenance—that frequently results in reduced efficiency and productivity for computer usage. 	
Similar reasons also account for the Soviet lag in microelectronics technology as well as instrumentation and test equipment; these technology lags in components and tools that are essential for modern computers contribute directly to the Soviet lag in computer technology. It is unlikely that the entrenched Soviet bureaucracy—which tends to favor the status quo—will take the necessary steps in the foreseeable future to	
correct many of these well-recognized problems.	25X1
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in both civilian and military co Soviets have sufficient number volume military and civilian princluding Eastern Bloc allies, volume obtaining their desired comput	emputer applicates of computer of computer of computer of the state of the second of the second of the systems.	ers for highest priority, low- he remaining user community, ience shortages and delays in The shortage of Soviet r seriously the modernization of	25 X 1
fielded military systems. Hist USSR to avoid the complex m computers are an essential su United States. It is likely that weapons design has not taxed However, this approach may be	orically, there ultimission minbsystem—tha the conservate Soviet compose changing.	litary systems—for which t are frequently preferred in the cive Soviet philosophy in uter capabilities in the past. We believe that the Soviets will chnology into their weapon systems	25 X 1
and high-performance input/of technology. We do not expect about 1985, whereas the first 1976. In magnetic disk system United States. Lags in these system performance for applicas ballistic missile defense, an	t the Soviets of US commercians, the Soviets critical areas vertical areas vertical and applications of time commanda, the number pared for class	to have a supercomputer until all supercomputer was delivered in a sare about a decade behind the will constrain Soviet computering high-speed capabilities, such a requiring high input/output d, control, and communications of experienced Soviet assisted projects may still be	25X1
dependent upon their advance technology, and upon their co acquiring Western and Japane and current technology assess behind the United States through	es in microeled ntinued activit se technology sments, we ex ughout the 198	. Judging from past performance pect the Soviets to fall further	
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the West or Japan—as they have done in the past—they would be able to narrow, at least temporarily, a specific technology gap. Also, if they made a major technological breakthrough in areas where they appear to be investing heavily, such as in optical computing or optical storage, the Soviets could overcome many of their deficiencies in high-performance	
computers.	25X1
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